



SPARC® Enterprise M4000/M5000 Servers Product Notes

For XCP version 1041

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Preface

These product notes contain late-breaking information about the SPARC® Enterprise M4000/M5000 server hardware, software, or documentation that became known after the documentation set was published.

Technical Support

If you have technical questions or issues that are not addressed in the SPARC Enterprise M4000/M5000 servers documentation, contact a sales representative or a certified service engineer.

Software Resources

The Solaris™ Operating System and Sun Java™ Enterprise System software are preinstalled on your SPARC Enterprise M4000/M5000 servers.

Contact a sales representative or a certified service engineer for software resources for your SPARC Enterprise M4000/M5000 servers.

Note – For latest patch information go to:

Global Site

<http://www.fujitsu.com/global/support/software/security/products-s/patch-info/>

Japanese Site

<http://software.fujitsu.com/jp/security/products-others/unix/index.html>

North American Site

<https://download.computers.us.fujitsu.com/>

Installation information and README files are included in the patch download.

Accessing Documentation

Instructions for installing, administering, and using your SPARC Enterprise M4000/M5000 servers are provided in the SPARC Enterprise M4000/M5000 servers documentation set.

The documentation set is available for download from the following website:

Global Site

<http://www.fujitsu.com/sparcenterprise/manual/>

Japanese Site

<http://primeserver.fujitsu.com/sparcenterprise/manual/>

North American Site

<https://download.computers.us.fujitsu.com/>

Note – Information in these product notes supersedes the information in the SPARC Enterprise M4000/M5000 servers documentation set.

Solaris documentation is available at:

<http://www.sun.com/documentation>

Fujitsu Welcomes Your Comments

If you have any comments or requests regarding this manual, or if you find any unclear statements in the manual, please state your points specifically, and forward it to a sales representative or a certified service engineer.

Please include the title and part number of your document with your feedback.

SPARC Enterprise M4000/M5000 Servers Product Notes

These product notes contain late-breaking information about the SPARC® Enterprise M4000/M5000 server hardware, software, or documentation that became known after the documentation set was published.

- [Supported Versions of Firmware and Software](#)
- [Patch Information](#)
- [Known Issues](#)
- [Hardware Installation and Service Issues](#)
- [Hardware Documentation Updates](#)
- [Software Issues](#)
- [Software Documentation Updates](#)

Supported Versions of Firmware and Software

The following firmware and software versions are supported in this release:

- XSCF Control Package (XCP) 1041 or later

Note – When the XCP version preinstalled in your server is under XCP 1041, you must upgrade to XSCF Control Package(XCP) 1041 or later. Use the web browser interface, also known as the browser user interface (BUI), to import XCP firmware and then execute the `flashupdate` command to upgrade the XCP firmware with the XSCF Shell.



Caution – CR ID #6534471: Improper handling of large page in kernel memory may cause random panics. Implement the workaround for CR ID #6534471 or check for the availability of a patch and install it immediately.

- The first version of the Solaris™ Operating System (OS) to support these servers is the Solaris 10 11/06 OS.
- This XCP release does not support the Capacity-On-Demand (COD) feature.
- XCP 1041 supports the External I/O Expansion Unit.

Note – For the offering schedule of COD product and External I/O Expansion Unit, please contact your sales representative.

Patch Information

This section lists mandatory patches for the SPARC Enterprise M4000/M5000 servers.

- 118833-36 (Install 118833-36 before 125100-04.)
- 125100-04 or later
- 120068-03 or later
- 123839-07 or later
- 125424-01 or later
- 125075-01 or later

Note – See [“Software Resources” on page vii](#) for information on how to find the latest patches. Installation information and README files are included in the patch download.

Known Issues

This section describes known issues in this release.

General Functionality Issues and Limitations

- Dynamic Reconfiguration (DR) is not recommended in cases below, due to the following restrictions on the DR addboard, deleteboard, and moveboard commands. Please contact your Sales representative or Technical Support for additional information and software support.
 - The target board (SB/XSB) with permanent memory. See [“Identifying Permanent Memory in a Target Board”](#) on page 31.
 - The target board (SB/XSB) with optional I/O cards because of some restrictions on specific cards.



Caution – Use of DR in an unsupported configuration might result in a domain panic or might hang the system.

- Domains using the ZFS file system can not use Reconfiguration.
- PCI Hot-plug feature is not available for this release.
Please contact your sales representative or technical support for additional information and software support.
- SPARC Enterprise M4000/M5000 servers are cold service machines. Hot-swapping of the CPU/Memory board unit (CMU), I/O Unit (IOU), or any eXtended System Control Facility (XSCF) unit is not supported.
- The XSCF web browser interface, also known as the browser user interface (BUI), has limited availability in this release. It can be used for importing the XSCF firmware and it supports the snapshot Full log set collection function. Use the command-line interface (CLI) instead on the Service Processor and the domains for other activities.
- Power off all domains before upgrading the XCP firmware.
- In this release, to conduct the maintenance work of COD board, it is necessary to power off the system.

Hardware Installation and Service Issues

This section describes hardware specific issues and workarounds.

Specific Issues and Workarounds

[TABLE 1](#) lists known hardware issues and possible workarounds.

TABLE 1 Hardware Issues and Workarounds

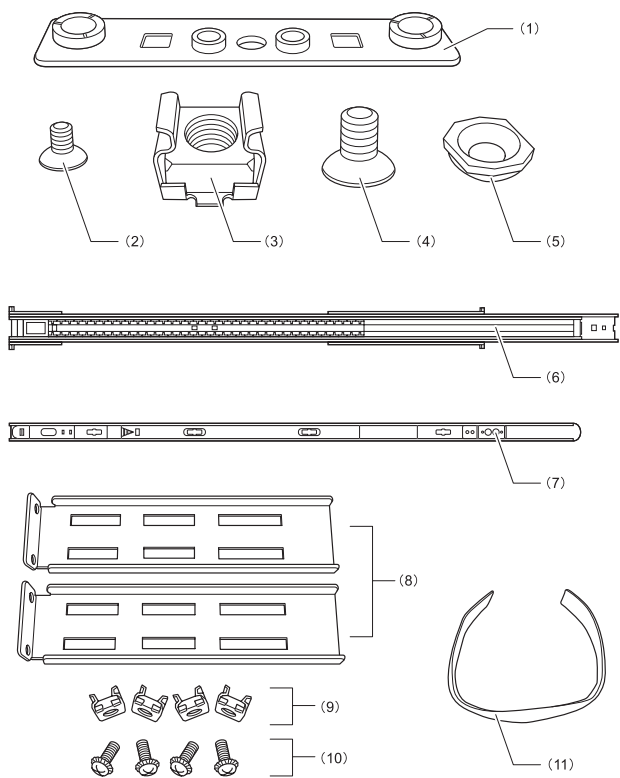
CR ID	Description	Workaround
6433420	The domain console might display a Mailbox timeout or IOCB interrupt timeout error during boot.	Issue a <code>reset-all</code> command from the OBP (OK) prompt and reboot.
6488846	During boot, the domain console might display a checksum error for the SG(X)PCI2SCSIU320-Z SCSI controller I/O card.	Check for the availability of the latest controller card firmware.
6498780	On the SPARC Enterprise M4000/M5000 servers, the OpenBoot. PROM (OBP) might not detect the on-board disk (HDD) boot device. Performing a <code>boot disk</code> results in a console message: <code>Can't locate boot device</code>	The PCI or PCI-X plug-in adapter card might not be seated correctly. Reseat the card in slot 0 of the IOU.

Cautions for mounting the server in the 19-inch rack

About the parts which should be used

To mount the server in the 19-inch rack, use the parts shown on the following mount kit list.

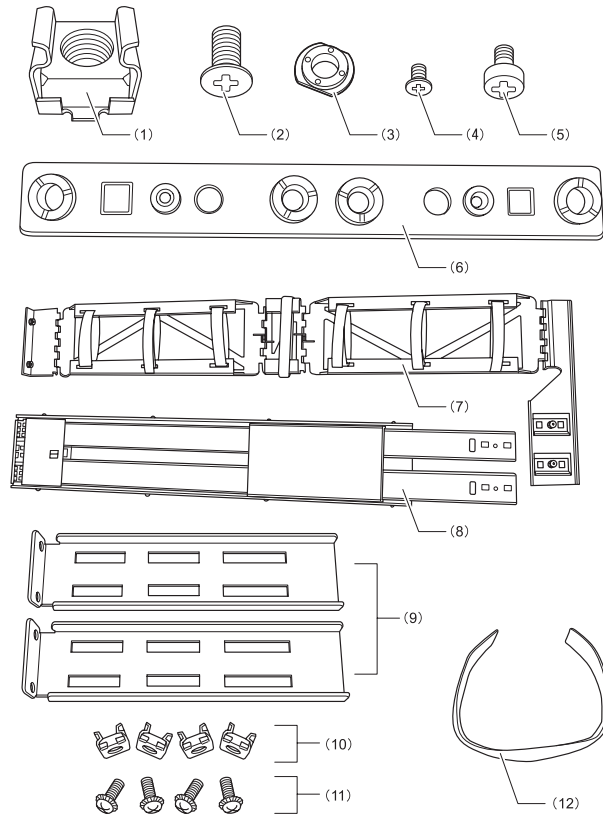
■ 19-inch rack mount kit list (M4000)



	Parts name	Required number
1	bracket	4
2	M2.5 flathead screw	8
3, 9	M5 cage nut	8

	Parts name	Required number
4	M5 flathead screw	8
5	washer	8
6	slide rail	2
7	inner rail	2
8	cable bracket	2
10	M5 screw	4
11	velcro strip	10

■ 19-inch rack mount kit list (M5000)



	Parts name	Required number
1, 10	M5 cage nut	8
2	M5 flathead screw	16
3	washer	16
4	M2.5 flathead screw	8
5	M4 screw	6
6	bracket	4
7	cable support arm *	1
8	slide rail	2

	Parts name	Required number
9	cable bracket *	2
11	M5 screw	4
12	velcro strip	14

*: About the cable management of M5000 server

On the SPARC Enterprise M5000 server, use a different cable clamp depending on whether or not the Copper link cable connected.

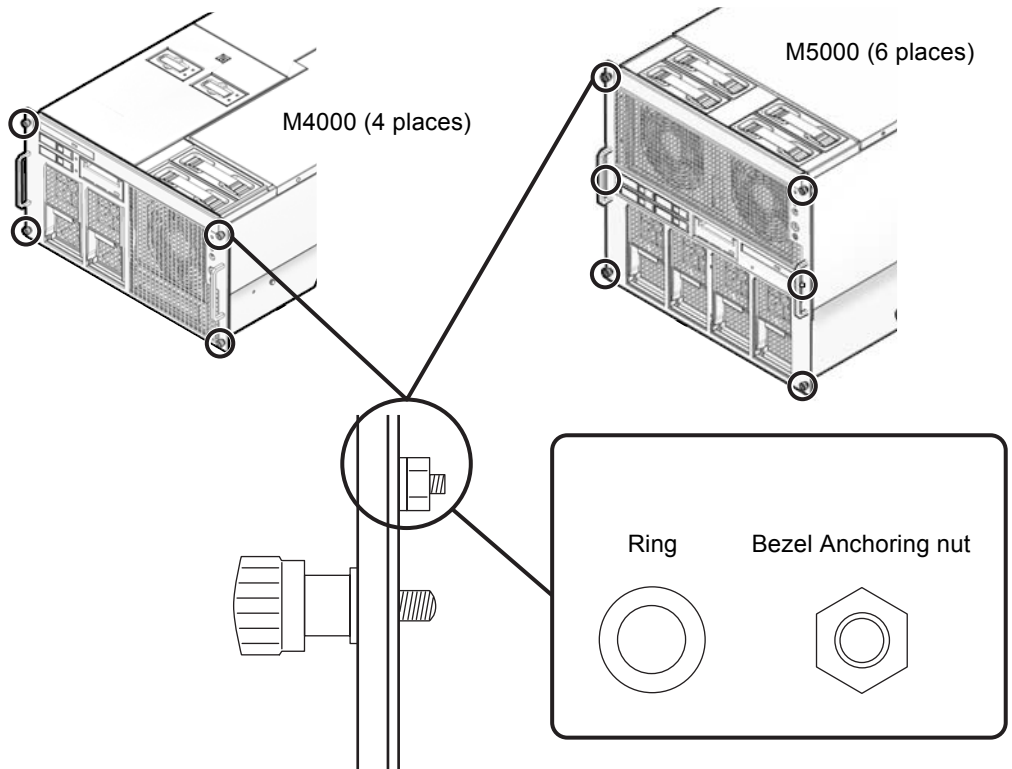
- When the Copper link cable is not used, use the cable support arm.
- When the Copper link cable is used, use the cable bracket.

About the interference of nut

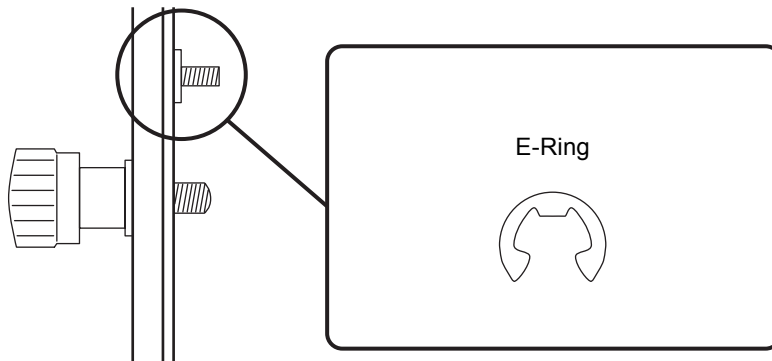
When you mount the SPARC Enterprise M4000 or M5000 server on the 19-inch rack, as you insert it all the way seated in the rack, the nut anchoring the bezel may interfere with the rack column and the server may fail to be seated correctly.

In such a case, please replace the bezel anchoring nut and ring with the E-Ring.

1. Remove the interfering bezel anchoring nut and ring.



2. In place of the removed nut and ring, attach the E-Ring, included in the rack mount kit.



3. Insert the server all the way seated in the rack, to lock it in place.

Attaching End Caps to the Rails

After securing the cable management arm (CMA) to the SPARC Enterprise M4000/M5000 server, attach the provided end caps to the rails.

1. Secure the CMA to the server.

Refer to the *Equipment Rack Mounting Guide* for information on installing the CMA to the server.

2. Attach the end caps onto the slide rails.

For the SPARC Enterprise M4000 server, an end cap is attached to both the right and left rear rails ([FIGURE 1](#)).

For the SPARC Enterprise M5000 server, two end caps are attached to the rails on which the CMA is not attached ([FIGURE 2](#)).

Note – If the CMA is not used, attach all end caps to the rails of the server. The SPARC Enterprise M4000 server uses two end caps. The SPARC Enterprise M5000 server uses four end caps.

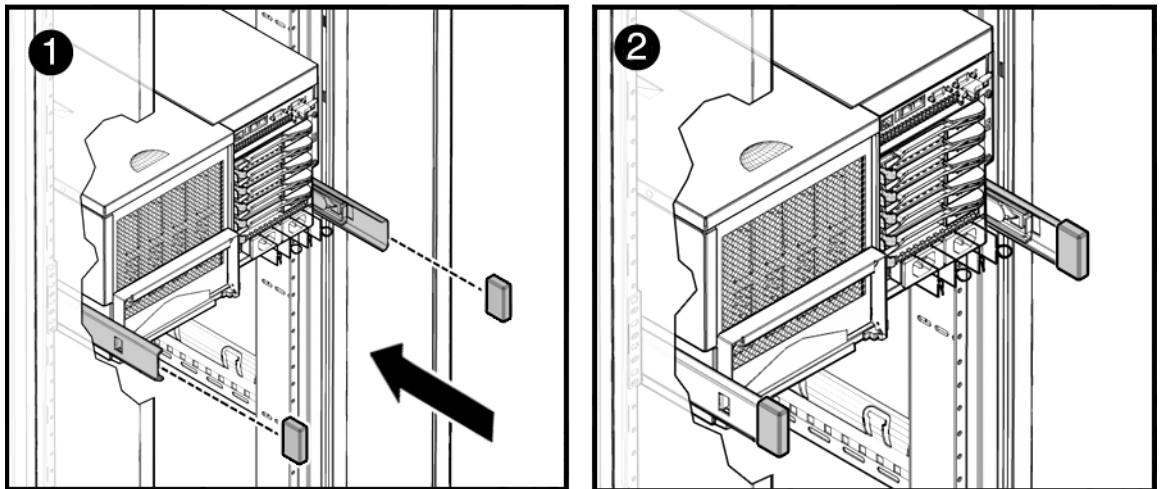


FIGURE 1 Installing End Caps on the SPARC Enterprise M4000 Slide Rails

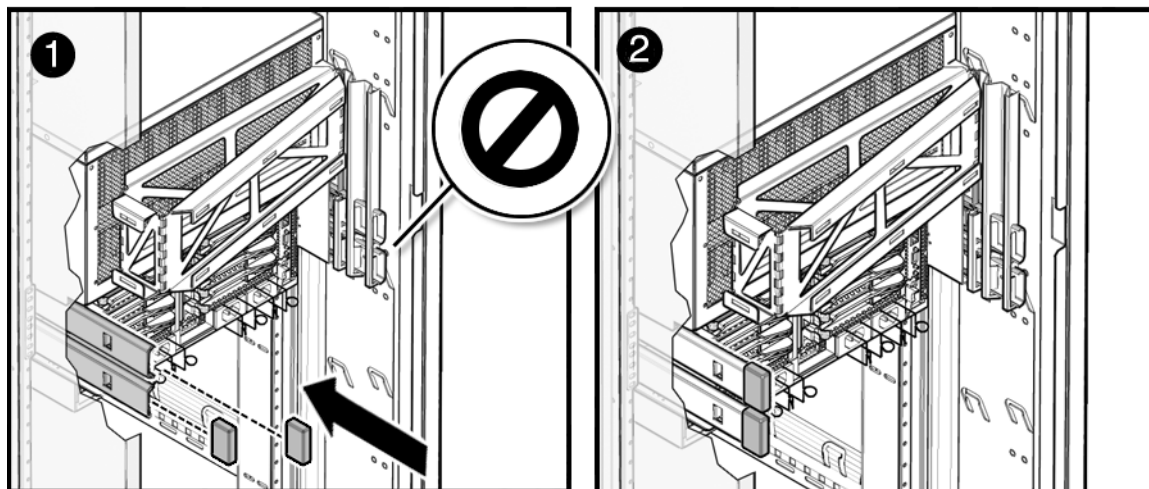


FIGURE 2 Installing End Caps on the Left Rear of the SPARC Enterprise M5000 Slide Rails

3. **Connect the power cables to the rear of the server and secure them with the cable retention clamps.**



Caution – Do not connect the power cables to a power source at this time.

4. **Run the power cables beneath the CMA and secure them in place with tie wraps.**
The power cables and infiniband cables should hang loosely in a service loop behind the server or the CMA might not be able to fully retract.

Note – If additional attachment points are required to route the cables, install the optional bracket kit.

5. Ensure that the server can slide in and out of the equipment rack without dislodging the power cables.

FIGURE 3 shows how the cable management arm extends and retracts.

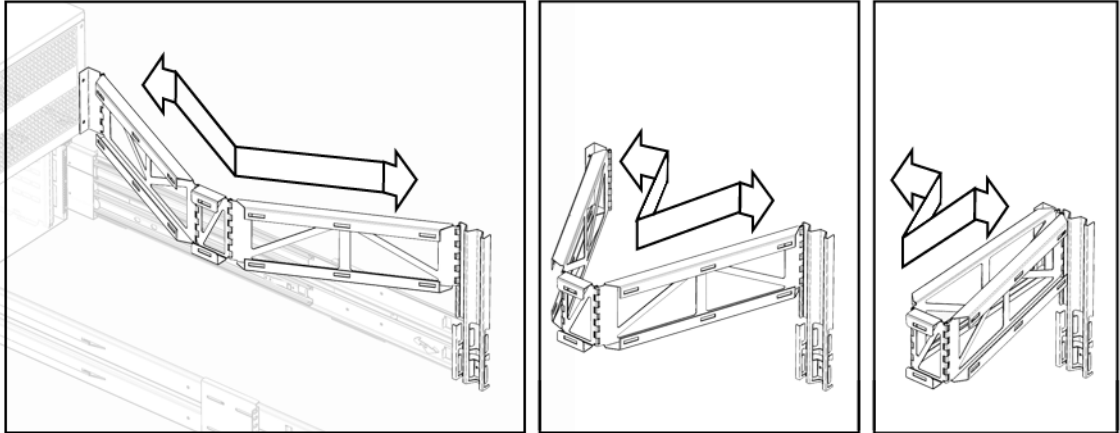


FIGURE 3 Cable Management Arm Extended and Retracted (SPARC Enterprise M5000 Server Shown)

6. Slide the server into the equipment rack.
7. Tighten the four (4) captive screws at the front of the server to secure the server in the equipment rack.
8. Replace the rack stabilizer to its original position.

Installing the Bracket Kit (Optional)

If additional attachment points are required to route the cables, the bracket kit can be installed. The bracket kit includes the following:

- Two (2) brackets
- Four (4) m5 screws
- Four (4) m5 cage nuts
- Ten (10) velcro strips (SPARC Enterprise M4000 Server)
- Fourteen (14) velcro strips (SPARC Enterprise M5000 Server)

These brackets can be used on the SPARC Enterprise M4000 server. And these brackets can be used on the SPARC Enterprise M5000 server using the Copper link cable.

1. **Extend the rack stabilizer.**
2. **Slide the server out of the rack several inches for access to the rear of the equipment rack.**
3. **Position the cage nuts behind the threaded ears of the equipment rack and insert the two (2) screws through the bracket and rack ear ([FIGURE 4](#)).**

Brackets should be positioned near the top level of the server or slightly below it.

Note – Brackets can be installed one per side, one only (right or left side), or two on one side, as desired for convenience in cable management.

4. Twist the cage nuts onto the screws from behind the rack ears.

The flat edges of the cage nuts should be aligned with the rack post to prevent the server from scraping against it.

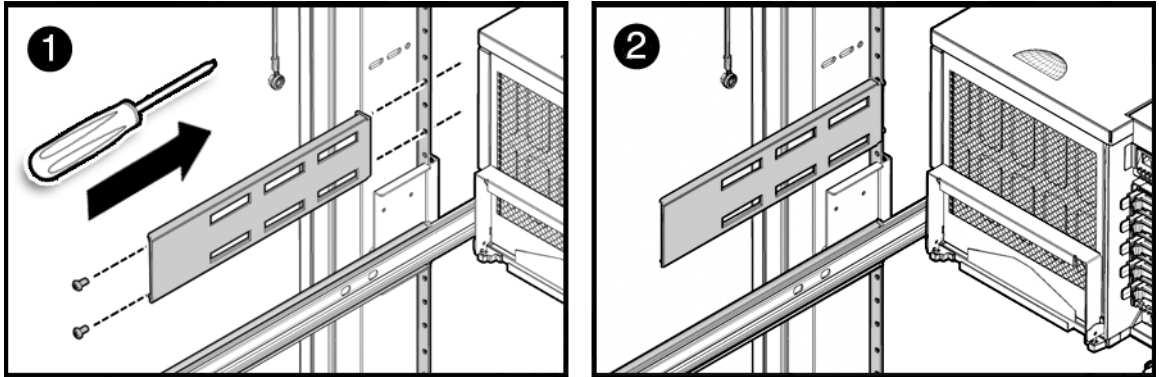


FIGURE 4 Installing the Bracket Kit in a rack 1000

5. Insert velcro strips in the desired slots of the bracket to hold back cables.

Built-in cut-outs along the sides of the equipment rack can also be used to insert velcro strips to hold back cables, as desired.

6. Slide the server into the equipment rack.

7. Replace the rack stabilizer to its original position.

Hardware Documentation Updates

[TABLE 2](#) lists known documentation updates.

TABLE 2 Documentation Updates

Title	Page Number	Update
All SPARC Enterprise M4000/M5000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW. Updated glossary terms: <i>External I/O Expansion Unit</i> — A rack mountable device to add-on PCI slots. It is connected to the system's I/O unit through the PCIe connection and contains one or two I/O boats. <i>I/O boat</i> — An I/O unit in the External I/O Expansion Unit. The I/O boat connects to a PCI-Express (PCIe) slot through a PCIe switch or a PCI-X bridge on the I/O boat and offers either six PCI-X slots or six PCIe slots.
SPARC Enterprise M4000/M5000 Servers Site Planning Guide	1-7	TABLE 1-3 "Midrange Servers Physical Specifications" Correct numerical value of "Depth" is 810mm/31.9 in. for the SPARC Enterprise M4000/M5000 servers.
SPARC Enterprise M4000/M5000 Servers Site Planning Guide	2-4	TABLE 2-2 "Midrange Servers Electrical Specifications" See "Electrical Specifications" on page 19 for the changes.
SPARC Enterprise M4000/M5000 Servers Installation Guide	2-8	TABLE 2-3 "Powercords" See "Cable Connections" on page 19 for the changes.
SPARC Enterprise M4000/M5000 Servers Installation Guide	3-3	3.3, "Connecting the Administration Console". The RJ-11 connector at the top of Figure 3-1 was not labelled. The RJ-11 connector is not for connection to TNV circuits. Do not use this connector.

TABLE 2 Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M4000/M5000 Servers Service Manual	1-4	1.3.4, "Handling Components" The following caution will be added.  Caution – In the PCI cassette part, when removing cables such as LAN cable, if your finger can't reach the latch lock of the connector, press the latch with a flathead screwdriver to remove the cable. Forcing your finger into the clearance can cause damage to the PCI card.
SPARC Enterprise M4000/M5000 Servers Service Manual	4-11	4.4.3, "Powering the Server Off Manually" Step 4 "Verify the state of the status XSCF STANDBY LED on the operator panel is off" should be replaced with the following description: "Verify the state of the status Power LED on the operator panel is off."
SPARC Enterprise M4000/M5000 Servers Service Manual	8-5	8.1.2, "Removing the PCI Cassette" The cable management arm of the SPARC Enterprise M4000 server will not be supported. The following note will be deleted accordingly. Note - The cable management arm of the SPARC Enterprise M4000 server might obstruct access to the PCI cassettes. Do not force the arm out of the way of the cassettes, because it will become permanently bent. Pull the quick release button and disconnect the slide end of the arm. Once disconnected, the arm can be safely held out of the way when removing the cassettes. Instead, the following caution will be added.  Caution – When removing cables such as LAN cable, if your finger can't reach the latch lock of the connector, press the latch with a flathead screwdriver to remove the cable. Forcing your finger into the clearance can cause damage to the PCI card.
SPARC Enterprise M4000/M5000 Servers Service Manual	8-6	8.1.3, "Installing the PCI Cassette" See "Installing the PCI Cassette" on page 20 for the changes.

TABLE 2 Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M4000/M5000 Servers Service Manual		"Cold Replacement" "This step includes turning the keyswitch to the Service position, verifying the state of the LEDs and disconnecting power cables" should be substituted with the following description: "This step includes turning the keyswitch to the Service position, verifying that the Power LED is turned off and disconnecting power cables."
SPARC Enterprise M4000/M5000 Servers Service Manual	9-1 15-1	CHAPTER 9, "XSCF Unit Replacement" CHAPTER 15, "Operator Panel Replacement" The following important message will be added.
Note – If you replace the XSCF unit and the operator panel simultaneously, system will not operate normally. Execute the <code>showhardconf</code> command or the <code>showstatus</code> command to confirm that the component replaced earlier is operating normally, before replacing the subsequent FRU.		
SPARC Enterprise M4000/M5000 Servers Service Manual	11-7	11.2, "DIMM Replacement" See “DIMM Replacement” on page 21 for the changes.
SPARC Enterprise M4000/M5000 Servers Service Manual	C-7	TABLE C-5 "Power Supply Feature" See “Electrical Specifications” on page 19 for the changes.

Electrical Specifications

The following changes belong in the SPARC Enterprise M4000/M5000 Servers Service Manual.

TABLE 3 Power Supply Features

	SPARC Enterprise M4000	SPARC Enterprise M5000
Power draw (maximum)	2016W	3738W
Volt Ampere	2058 VA	3815 VA
Heat	6879 BTUs/hr (7258 kJ/hr)	12754 BTUs/hr (13457 kJ/hr)

Cable Connections

The following changes belong in the SPARC Enterprise M4000/M5000 Servers Installation Guide.

TABLE 4 Powercords

	SPARC Enterprise M4000	SPARC Enterprise M5000
SPARC Enterprise M4000 Connector	Americas, Taiwan	NEMA L5-15 125V 15A
	Japan, Korea	NEMA L6-20 250V 20A
	RoTW	IEC60309 16A 250V, 3PIN with IEC320 C20
SPARC Enterprise M5000 Connector	Americas, Taiwan	NEMA L5-15 125V 15A
	Japan, Korea	NEMA L6-20 250V 20A
	RoTW	IEC60309 16A 250V, 3PIN with IEC320 C20

Updates of the SPARC Enterprise M4000/M5000 Servers Service Manual

The following information supersedes the information in the *SPARC Enterprise M4000/M5000 Servers Service Manual*.

Installing the PCI Cassette



Caution – Do *not* force the PCI cassette into a slot. Doing so can cause damage to the cassette and server.

1. Align the PCI cassette on the gray plastic guide and install it into the slot.
2. Lock the lever into place to seat the cassette.

Note – As the lever is moved pressure will build up, then just prior to locking into place the pressure will suddenly release. If the lever locks in place without the pressure release, the card may not be seated correctly. If this happens the card should be removed and reinstalled.

Note – When you insert the PCI cassette using hot-swap, the cassette is automatically powered on and configured. Check that the power LED on the cassette is LIT to be certain the cassette is correctly seated.

3. Connect all cables to the PCI cassette and reconnect the cable management arm if necessary.

DIMM Replacement

The DIMMs are cold FRU replacement components. The entire server must be powered off and the power cords disconnected to replace the DIMMs.

FIGURE 5 shows the memory board memory slot locations.

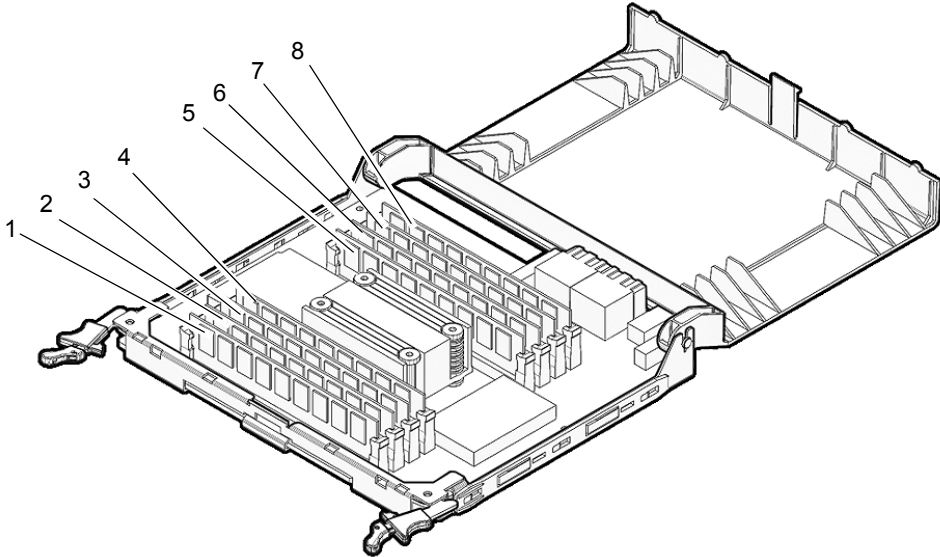


FIGURE 5 Memory Board DIMM Slot Numbering

Location Number	Component
1	MEM#2A, Memory Slot (Group A)
2	MEM#2B, Memory Slot (Group B)
3	MEM#3A, Memory Slot (Group A)
4	MEM#3B, Memory Slot (Group B)
5	MEM#1B, Memory Slot (Group B)
6	MEM#1A, Memory Slot (Group A)
7	MEM#0B, Memory Slot (Group B)
8	MEM#0A, Memory Slot (Group A)

You can mount up to 4 memory boards on the SPARC Enterprise M4000 server and up to 8 memory boards on the SPARC Enterprise M5000 server. The DIMMs on the memory board are grouped into group A and group B.

Here are the DIMM mount conditions:

- In each group, 4 DIMMs are mounted in a unit.
- The capacity of the DIMMs in group A must be equal to or larger than the capacity of the DIMMs in group B. You need not necessarily mount DIMMs in group B.
- In each of the groups, mount the DIMM of same capacity and of same rank. The DIMMs of different capacity can't be mixed in a group.

To replace with the DIMMs of different capacity or different rank, you need to follow the above conditions on every memory board in the same CMU.

Software Issues

This section describes software specific issues and workarounds.

XCP Issues and Workarounds

[TABLE 5](#) lists known XCP issues and possible workarounds.

TABLE 5 XCP Issues and Workarounds

ID	Description	Workaround
RTIF1-070418-004	All domains must be powered off before upgrading the XCP firmware.	Power off domains before using the <code>flashupdate</code> command to upgrade XCP firmware.
RTIF1-070418-005	If you log in to the XSCF while it is still booting, you may get a <code>bash\$</code> prompt instead of the <code>XSCF></code> prompt, and be unable to perform most operations.	Log out of the <code>bash\$</code> prompt and wait for the XSCF to finish booting.
RTIF1-070418-009	While XSCF is running, error message of "OOM kill" might be displayed to XSCF console, and process may go down and/or watchdog timeout may occur and XSCF may reboot.	Check that XSCF is started. If not started, use the <code>rebootxscf(8)</code> command to restart XSCF, or stop all the domains and then execute the system power off/on (AC OFF/ON).
RTIF1-070418-010	The <code>showdomainstatus -a</code> command shows domain status as Powered Off, but the <code>showboards -a</code> command shows the domain is testing.	Use the <code>showboards</code> command to check the status of system power. The <code>showdomainstatus</code> command takes a longer time to show the correct status.
RTIF1-070418-011	Some commands that update configuration data take a relatively long time to execute.	Do not cancel <code>set*</code> commands. They appear to hang, but eventually complete in about 30 seconds.
RTIF1-070418-012	The fault (<code>memory.block.ue</code>) is encountered and reported periodically.	An uncorrectable error exists in a DIMM and the DIMM should be replaced.
RTIF1-070418-023	Using the <code>rebootxscf</code> command may result in a process down error, and possibly an FMA event with MSG ID SCF-8005-NE.	Ignore this event.
RTIF1-070418-025	<code>showaudit all</code> shows a long list of defaults in the policy section after the database is cleared.	Update the database with the following: <code>setaudit -a opl=enable</code> <code>setaudit -a opl=default</code>

TABLE 5 XCP Issues and Workarounds (Continued)

ID	Description	Workaround
RTIF1-070528-001	When you have updated the /etc/ttydefs file of Solaris to disable the console flow control, you cannot disable the console flow control on the telnet via a server.	None available at this time.
RTIF1-070528-002	While XSCF is running, watchdog timeout may occur and XSCF may reboot.	Check that XSCF is started. If not started, use the <code>rebootxscf(8)</code> command to restart XSCF, or stop all the domains and then execute the system power off/on (AC OFF/ON).

Solaris Issues and Workarounds

TABLE 6 lists known issues and possible workarounds.

TABLE 6 Specific Issues and Workarounds Concerning Solaris

CR ID	Description	Workaround
6416224	System performance can degrade using a single NIC card with more than 5,000 connections.	Use multiple NIC cards to split network connections.
6440061	The domain console may display this message: <code>ipsec_check_inbound_policy: Policy Failure for the incoming packet (not secure)</code>	This message can be safely ignored.
6441349	The system may hang if there is an I/O error in the system.	None available at this time.
6459540	The DAT72 internal tape drive on SPARC Enterprise M4000/M5000 may time out during tape operations.	Add the following definition to <code>/kernel/drv/st.conf</code> : <code>tape-config-list = "SEAGATE DAT DAT72-000", "SEAGATE_DAT DAT72-000", "SEAGATE_DAT DAT72-000"; SEAGATE_DAT DAT72-000= 1,0x34,0,0x9639,4,0x00,0x8c,0x8c, 0x8c,3;</code>

TABLE 6 Specific Issues and Workarounds Concerning Solaris *(Continued)*

CR ID	Description	Workaround
6466617	Performing a hot plug operation with the PCI-E slot too quickly interrupts a PCI leaf reset and fails, creating a cfgadm(1M): Component system is busy error.	Pause a few seconds between the issue of each <code>cfgadm -c</code> command.
6472153	If you create a Solaris Flash archive on a non-SPARC Enterprise M4000/M5000 sun4u server and install it on a SPARC Enterprise M4000/M5000 sun4u server, the console's TTY flags will not be set correctly. This can cause the console to lose characters during stress.	Just after installing Solaris OS, telnet into the SPARC Enterprise M4000/M5000 server to reset the console's TTY flags as follows: <pre># sttydefs -r console # sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"</pre>
6481002	Installing the Solaris from the network using certain PCI-Express cards may cause a panic.	This procedure is required only once. If you are using a Sun PCI-E Dual Gigabit Ethernet Adapter MMF card or a Sun PCI-E Dual Gigabit Ethernet Adapter UTP card, do not install the Solaris using either of these cards. Instead, use other network devices, such as the onboard Gigabit Ethernet or another network device.
6485555	On the SPARC Enterprise M4000/M5000 servers, On-board Gigabit Ethernet NVRAM corruption could occur due to a race condition.	None available at this time.

TABLE 6 Specific Issues and Workarounds Concerning Solaris *(Continued)*

CR ID	Description	Workaround
6496337	The "cpumem-diagnosis" module may fail to load after uncorrectable error(UE) panic. Systems will function correctly but events normally automatically diagnosed by FMA using this module will require manual diagnosis. Example: SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Thu Feb 15 15:46:57 JST 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: col2-ff-em7-d0	If problem occurred, implement the following workaround: 1. Remove the following file. <pre># rm /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis</pre> 2. Restart fmd service. <pre># svcadm restart fmd</pre> To avoid this problem in advance, add "rm -f /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis" in /lib/svc/method/svc-dumpadm file as below. <pre># # We haven't run savecore on a # dump device yet # savedev=none rm -f /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis #</pre>
6498283	Using the DR deleteboard command while psradm operations are running on a domain might cause a system panic.	There is no workaround. Check for the availability of a patch for this defect.
6499304	CPU isn't offlined and unexpected message is displayed on console when many correctable error(CE) occurs. Example: SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Fri Feb 2 18:31:07 JST 2007 PLATFORM: SPARC-Enterprise, CSN: BE80601035, HOSTNAME: FF2-35-0	Check CPU status on XSCF.

TABLE 6 Specific Issues and Workarounds Concerning Solaris *(Continued)*

CR ID	Description	Workaround
6502204	Unexpected error messages may be displayed on console on booting after CPU UE panic. Example: <pre>SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Tue Jan 9 20:45:08 JST 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: 2030636002, HOSTNAME: P2-DC1- 16-d0</pre>	If you see unexpected messages, check system status on XSCF.
6502750	Notification message for inserted or removed card by PCI hotplug may not output.	None available at this time.
6505921	Correctable error on the system PCIe bus controller generates an invalid fault.	Create a file <code>/etc/fm/fmd/fmd.conf</code> containing the following lines: <pre>setprop client.buflim 40m setprop client.memlim 40m</pre>
6508432	Many correctable errors (CE) may occur, and despite these are the correctable errors, domain may panic.	Set the following to <code>/etc/system</code> and then reboot the domain: <pre>set pcie:pcie_aer_ce_mask = 0x2001</pre>
6508434	The domain may panic when an additional PCI-X card is installed or a PCI-X card is replaced by using PCI hot plug.	Do not insert a different type of PCI-X card on the same PCI slot card by using PCI hotplug.
6509337	s10s_u3 wanboot failes - The server returned 416: Requested Range Not Satisfiable.	None available at this time.
6510779	On a large single domain configuration, the system may incorrectly report very high load average at times.	There is no workaround. Check for the availability of a patch for this defect.
6510861	When Dual-Channel Ultra320 SCSI Card (SE0X7SC2F,SE0X7SC2X) is mounted, correctable errors(CE) occur and system may panic.	To mask these errors with Dual-Channel Ultra320 SCSI Card (SE0X7SC2F,SE0X7SC2X), add the following entry to the <code>/etc/system</code> file and then reboot the system: <pre>set pcie:pcie_aer_ce_mask = 0x31c1</pre>
6511374	Unexpected error messages may be displayed on console after changing the system configuration. Example: <pre>WARNING: Translation error source /LSB0/B0/0, PA 3c0000000000, target /LSB0/B0/20000000</pre>	This message can be safely ignored.

TABLE 6 Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6515648	"Replumb Failed" error appears when <code>dr@0:SB1::memory</code> fails.	Once the DR operation is complete, it can be plumbed up manually. Example steps/procedure to re-plumb the interface manually: <pre># ifconfig interface plumb xxx.xxx.xxx.xxx netmask + broadcast + up # ifconfig interface group group-name # ifconfig interface addif xxx.xxx.xxx.xxx -failover deprecated up</pre> This workaround assumes that the <code>/etc/hostname.interface</code> file is correctly configured for the IPMP group and does not need any modification. The IP addresses used in the example above should match what was previously used and what matches the <code>/etc/hostname.<interface></code> file.
6519290	Large amounts of I/O on swap devices can cause the system to appear hung by overwelling the I/O system. The amount of I/O required can be generated through a number of ways, eg memory shortage, heavy use of <code>/tmp</code> etc.	Set the following to <code>/etc/system</code> and then reboot the domain: <pre>set maxfastscan=0x2000</pre>
6520990	Domain may cause a panic when <code>deleteboard</code> for kernel board by using Dynamic Reconfiguration (DR).	To mask this error, add the following entry to the <code>/etc/system</code> file. <pre>set drmach:fmem_timeout = 30</pre>
6522017	Domains using the ZFS filesystem cannot use DR.	There is no workaround.
6522433	After the CPU hardware error occurred, the <code>fmdump(1M)</code> command on the domain may display an incorrect faulty component.	Check system status on XSCF.
6529714	Warning messages occur while trying to configure more than four X4447A-Z or X1027A-Z1 cards into one I/O Boat.	No workaround available at this time.
6530178	DR <code>addboard</code> command can hang. Once problem is observed, further DR operations are blocked. Recovery requires reboot of the domain.	There is no workaround. Check availability of a patch for this bug.
6530288	<code>Ap_Id</code> format may not be shown correctly by <code>cfgadm(1M)</code> .	None available at this time.

TABLE 6 Specific Issues and Workarounds Concerning Solaris *(Continued)*

CR ID	Description	Workaround
6530753	Some of the PCI slots in the External I/O Expansion Unit PCI slots are not displayed during a normal boot operation.	Use one of the following operations to display all of the PCI slots. • <code>boot -r</code> (at open boot prompt) • <code>devfsadm -C</code> (at Solaris prompt) • <code>cfgadm</code> (twice at Solaris prompt)
6531036	The error message <code>network initialization failed</code> appears repeatedly after a boot net installation.	No workaround available at this time. Ignore the messages.
6531668	System hangs when executing parallel hotplug operation with SP DR in suspend phase.	No workaround available at this time.
6532215	<code>volfs</code> or <code>dscp</code> service may fail when domain is booted. <code>svc:/platform/sun4u/dscp:default: Method "/lib/svc/method/svc-dscp start" failed with exit status 95.</code> <code>svc:/system/filesystem/volfs:default: Method or service exit timed out. Killing contract 59.</code>	Restart the service if the failure is observed. To avoid the problem, issue the following commands. <pre># svccfg -s dscp setprop start/timeout_seconds=count: 300 # svccfg -s volfs setprop start/timeout_seconds=count: 300 # svcadm refresh dscp # svcadm refresh volfs</pre>
6534471	Domain may panic.	Add the following line to <code>/etc/system</code> and reboot the domain. <pre>set heaplp_use_stlb=0</pre>
6535564	PCI hot plug to PCI slot #0, #1 or External IO Expansion Unit may fail on XSB added by DR.	There is no workaround. Use DR instead of PCI hot plug if need to add or remove PCI card on the XSB.

TABLE 6 Specific Issues and Workarounds Concerning Solaris *(Continued)*

CR ID	Description	Workaround
6536564	showlogs(8) and showstatus(8) command on XSCF might report wrong I/O component due to wrong diagnosis by Solaris Fault management Architecture when faults in I/O devices occur.	To avoid this problem, issue the following commands on the domain. <pre># cd /usr/platform/SUNW,SPARC-Enterprise/lib/fm/topo/plugins # mv ioboard.so ioboard.so.orig # svcadm restart fmd</pre> If the following messages are displayed on the domain, contact a sales representative or a certified service engineer. Example: <pre>SUNW-MSG-ID: SUNOS-8000-1L, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Sun May 6 18:22:24 PDT 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: sparc</pre>
6537511	Bluetooth partner is hung during security tests execution	Restart application server
6539084	Sun PCIe Quad-port Gigabit Ethernet Adapter UTP card(X4447A-Z) might panic during a reboot.	There is no workaround. Check for the availability of a patch for this defect.
6542632	Memory leak in PCIe module if driver attach fails.	There is no workaround. Check for the availability of a patch for this defect.
6545685	If the following message displayed on the OS console, memory degradation or XSB deconfiguration may occur in the subsequent reboot.	Add the following to /etc/system and then reboot the domain: <pre>set mc-opl: mc_max_rewrite_loop = 10000</pre>
	Example: <pre>mc-opl: WARNING: mc-opl rewrite timeout on /LSB0/B0</pre>	

Identifying Permanent Memory in a Target Board

Dynamic reconfiguration is not recommended for production use if the target board (SB/XSB) has permanent memory (kernel memory).

1. Log in to XSCF.
2. Execute the following command:

```
XSCF> showdevices -d domain_id
```

The following example shows a display of the `showdevices -d` command where 0 is the `domain_id`.

```
XSCF> showdevices -d 0

...

Memory:
-----

```

DID	XSB	board mem MB	perm mem MB	base address	domain mem MB	target XSB	deleted mem MB	remaining mem MB
00	00-0	8192	0	0x0000000000000000	24576			
00	00-2	8192	1674	0x000003c000000000	24576			
00	00-3	8192	0	0x0000034000000000	24576			

```
...
```

The entry for column 4 perm mem MB indicates the presence of permanent memory if the value is non-zero.

The example shows permanent memory on 00-2, with 1674 MB.

If the board includes permanent memory, when you execute the `deleteboard` command or the `moveboard` command, the following notice appears:

```
System may be temporarily suspended, proceed? [y|n]:
```

3. If a board includes permanent memory, enter `n` to cancel the DR command.

```
System may be temporarily suspended, proceed? [y|n]:n
disconnect SB5
DR operation canceled by operator.
XSCF>
```

Software Documentation Updates

This section contains late-breaking software information that became known after the documentation set was published and corrections in the SPARC Enterprise M4000/M5000 Servers Software documentation.

[TABLE 7](#) lists known documentation updates.

TABLE 7 Documentation Updates

Title	Page Number	Update								
All SPARC Enterprise M4000/M5000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.								
SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide	D-5	Frequently Asked Questions (FAQ) in "Troubleshooting XSCF and FAQ" The option for OS dump is not "request" but "panic". Correction: 1. First, execute the <code>reset(8)</code> command with the panic option from the XSCF Shell.								
SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual	ioxadm(8) command	The required privileges for the <code>ioxadm(8)</code> command are as follows: <table><tr><th>Required Privileges</th><th>Commands</th></tr><tr><td>platop</td><td>env, list</td></tr><tr><td>platadm</td><td>env, list, locator, poweroff, poweron</td></tr><tr><td>fieldend</td><td>env, list, locator, poweroff, poweron, reset, settled</td></tr></table> The corrections here, if not otherwise specified, also apply to the man pages which XSCF provides. And they supersede the information on the man pages.	Required Privileges	Commands	platop	env, list	platadm	env, list, locator, poweroff, poweron	fieldend	env, list, locator, poweroff, poweron, reset, settled
Required Privileges	Commands									
platop	env, list									
platadm	env, list, locator, poweroff, poweron									
fieldend	env, list, locator, poweroff, poweron, reset, settled									

TABLE 7 Documentation Updates (*Continued*)

Title	Page Number	Update																		
SPARC Enterprise M4000/M5000/M8000/M9 000 Servers XSCF Reference Manual	showldap(8) manpage showlookup(8) manpage showemailreport(8) manpage	The man pages for showldap, showlookup and showemailreport do not state that these commands are available with the fieldeng privilege.																		
SPARC Enterprise M4000/M5000/M8000/M9 000 Servers XSCF Reference Manual	setaudit(8) manpage showaudit(8) manpage	The setaudit and showaudit man pages are incorrect with respect to audit class information. The following are the audit classes and their values: <table><tr><td>ACS_SYSTEM</td><td>1</td></tr><tr><td>ACS_WRITE</td><td>2</td></tr><tr><td>ACS_READ</td><td>4</td></tr><tr><td>ACS_LOGIN</td><td>8</td></tr><tr><td>ACS_AUDIT</td><td>16</td></tr><tr><td>ACS_DOMAIN</td><td>32</td></tr><tr><td>ACS_USER</td><td>64</td></tr><tr><td>ACS_PLATFORM</td><td>128</td></tr><tr><td>ACS_MODES</td><td>256</td></tr></table>	ACS_SYSTEM	1	ACS_WRITE	2	ACS_READ	4	ACS_LOGIN	8	ACS_AUDIT	16	ACS_DOMAIN	32	ACS_USER	64	ACS_PLATFORM	128	ACS_MODES	256
ACS_SYSTEM	1																			
ACS_WRITE	2																			
ACS_READ	4																			
ACS_LOGIN	8																			
ACS_AUDIT	16																			
ACS_DOMAIN	32																			
ACS_USER	64																			
ACS_PLATFORM	128																			
ACS_MODES	256																			
SPARC Enterprise M4000/M5000/M8000/M9 000 Servers Administration Guide		Hotplugging of the IOU onboard device card (IOUA) is not supported at this time.																		

